

31

Notice of Allowability

Application No.

10/772,786

Examiner

Ephrem Alemu

Applicant(s)

SHARRAH ET AL.

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/19/06.
2. ☒ The allowed claim(s) is/are 1-48.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted:
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 10-19-2006
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20070104.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


PRIMARY EXAMINER

DETAILED ACTION

Drawings

1. The drawings filed on 02/05/04 are accepted.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Clement A. Berard on 1-04-07.

The application has been amended as follows:

In claim 21, line 20, after "coupled" insert --to said comparing circuit--.

The change has been made to clearly indicate that the control electrode being coupled to the comparing circuit.

Allowable Subject Matter

3. Claims 1-48 are allowed.
4. The following is an examiner's statement of reasons for allowance: It is agreed that the prior art of record fail to teach or suggest alone or in combination, the limitations: "a comparator (comparing circuit) responsive to a potential produced by the battery and to the reference potential for de-energizing only the first light source (incandescent light source) when the battery is discharged to a predetermined potential, but is not fully discharged; a second light source (solid state light source) that operates at a lower current than does the first light source

Art Unit: 2821

(incandescent light source) to produce light; and a second switch connected with the battery for selectively energizing the second light source (solid state light source) to produce light, whereby the second light source (solid state light source) is energizable by the battery after the comparator (comparing circuit) has de-energized the first light source (incandescent light source)” in a manner claimed in claims 1, 7, 8, 12 and 34, “a comparator responsive to a potential produced by the battery and to the reference potential for de-energizing only the first light source when the battery is discharged to a predetermined potential, but is not fully discharged; a second light source that operates at a lower current than does the first light source to produce light; a second switch connected with the battery for selectively energizing the second light source to produce light; and a transistor having a controllable conduction path connected with the battery and the second light source and having a control electrode coupled to the comparator, wherein the transistor energizes the second light source responsive to the comparator de-energizing the first light source when the battery potential is below the predetermined potential” as claimed in claim 11; “a comparing circuit responsive to a potential produced by the battery and to the reference potential for de-energizing only the incandescent light source when the battery is discharged to a predetermined potential, but is not fully discharged; the comparing circuit comprising a first transistor having a controllable conduction path connected with the battery and the incandescent light source for energizing and de-energizing the incandescent light source and having a control electrode to which the source of reference potential is coupled; a solid state light source; a second switch connected with the battery for selectively energizing the solid state light source to produce light independently of the first switch, or to produce light when the battery potential is below the predetermined potential, or to produce light independently of the first switch when the

Art Unit: 2821

battery potential is below the predetermined potential; and a second transistor having a controllable conduction path connected with the battery and the source of reference potential and having a control electrode coupled to the controllable conduction path of the first transistor for being controlled by the first transistor, whereby the solid state light source is energizable by the battery after the comparing circuit has de-energized the incandescent light source” as claimed in claim 18; “a comparing circuit responsive to a potential produced by the battery and to the reference potential for de-energizing only the incandescent light source when the battery is discharged to a predetermined potential, but is not fully discharged; a second switch connected with the battery for selectively energizing the solid state light source to produce light independently of the first switch, or to produce light when the battery potential is below the predetermined potential, and means for energizing the solid state light source responsive to the comparing circuit de-energizing the incandescent light source when the battery potential is below the predetermined potential, wherein the means for energizing comprises a second transistor having a controllable conduction path connected with the battery and the second light source and having a control electrode coupled to the comparing circuit for being controlled by the comparing circuit” as claimed in claim 21; “a source of reference potential coupled between the second electrode of the first transistor and the control electrode of the second transistor; wherein the second electrode of the second transistor is coupled to the control electrode of the first transistor and to the first terminal via a first load; and wherein the controllable conduction path of the second transistor becomes non-conductive for de-energizing only the first load as a received battery potential decreases to a predetermined potential at which a battery providing the predetermined potential is not fully discharged; and means for energizing a second load at least

Art Unit: 2821

when the first load is de-energized by the second transistor becoming non-conductive, whereby the second load is energizable by the received battery potential after the second transistor has de-energized the first load” as claimed in claim 22; “a source of reference potential coupled between the second end of the first switch and the control electrode of the first transistor; wherein the second electrode of the first transistor is coupled to the first terminal via a first load, and wherein the controllable conduction path of said first transistor becomes non-conductive for de-energizing only the first load as a received battery potential decreases to a predetermined potential at which a battery providing the predetermined potential is not fully discharged; and means for energizing a second load at least when the first load is de-energized by the first transistor becoming non-conductive, whereby the second load is energizable by the battery after the first transistor has de-energized the first load” as claimed in claim 28; “a source of reference potential coupled between the second end of the first switch and the control electrode of the first transistor; wherein the second electrode of the first transistor is coupled to the first terminal via a first load, and wherein the controllable conduction path of the first transistor becomes non-conductive for de-energizing only the first load as a received battery potential decreases to a predetermined potential at which a battery providing the predetermined potential is not fully discharged; whereby the second load is energizable by the battery after the first transistor has de-energized the first load” as claimed in claim 29; “a source of reference potential coupled between the second end of the first switch and the control electrode of the first transistor; wherein the second electrode of the first transistor is coupled to the first terminal via a load; and a second transistor having a controllable conduction path coupled between the battery and the source of reference potential and having a control electrode for controlling the conduction of the

Art Unit: 2821

controllable conduction path thereof, the control electrode thereof being coupled to the controllable conduction path of the first transistor for being controlled by the first transistor, wherein the controllable conduction path of the first transistor becomes non-conductive responsive to the reference potential and a received battery potential for de-energizing only the load as a received battery potential decreases to a predetermined potential at which a battery providing the predetermined potential is not fully discharged.” as claimed in claim 33; and “a source of reference potential coupled between the second end of the first switch and the control electrode of the transistor; a first light source for producing light when electrically energized; wherein the second electrode of the first transistor is coupled to the first terminal via the first light source, wherein the controllable conduction path of the transistor becomes non-conductive responsive to the reference potential for de-energizing only the first light source as a received battery potential decreases to a predetermined potential at which a battery providing the predetermined potential is not fully discharged; a second light source for producing light when energized at a lower current than that required by the first light source to produce light; and a second switch operable independently of the first switch, wherein the second switch and the second light source are coupled between the first and second terminals for selectively energizing the second light source, whereby the second light source is energizable by a received battery potential after the transistor has de-energized the first light source” as claimed in claim 35. It is for these reasons in combination with all the other limitations in the independent claims 1, 7, 8, 11, 12, 18, 21, 22, 28, 29, 33, 34 and 35, that claims 1-48 are allowable over prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2821

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McDermott (US 6,091,238) also teaches similar inventive subject matter. However the prior art listed above neither teach nor disclose the limitation described above for reason of allowance either alone or in combination.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EA
1-04-07



PRIMARY EXAMINER